M.R.O. 1—77,006—8-8-37.

(1) Number of pages 14

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 102	Press / Mis.
193-94	
Dated 13 1	1892.

Not to be folded or roughly handled

No. 193. Read the following letter from R. SMITH, Esq., Executive Engineer on special duty, Madura District, to the Chief Engineer for Irrigation, dated Perryaur Camp, 13th December 1871, No. 7-A. :—

I HAVE the honour to submit the subjoined report of the progress made with the Perryaur investigations during the past month.

2. The contour survey of the portion of the Perryaur basin now under examination was carried on throughout the month ; but I regret to have to state the work done is below the average, as Lieutenant Greer was compelled, by indisposition, to give up out-door work for sixteen days.

3. Tolerable progress has been made with the trial pits on the escape saddle and on the hill between it and the northern extremity of the proposed reservoir embankment, but no very reliable results have been obtained regarding the level of the compact rock, as the funds at our command would not admit of these excavations being vigorously prosecuted.

4. At 12 o'clock P.M. on the 25th ultimo the Perryaur rose to 24·41 feet above datum, and measures were taken early the following morning to ascertain the surface fall and the surface velocity of the stream at different stages of the flood. The information collected will be tabulated and submitted with the Perryaur Report for the current month.

5. The diagram and register showing the rainfall at the Perryaur Camps, and the discharge of the Perryaur during the month under review, are enclosed.

PERRYAUR PROJECT.

Table of Rainfall and Discharge of Perryaur during November 1871.

Date.	RAINFALL AT		Hours.	Water level in feet.	DISCHARGE.	
	Perryaur Camp.	Kythury Camp.			Cubic feet per second.	1,000 Cubic yards per day.
	INCHES.	INCHES.				
1st	0·33	0·17	6 A. M.	0·07	344	545
			6 P. M.	0·04	337	
2nd	0·67	0·47	6 A. M.	3·04	1,761	2,011
			12 noon.	1·75	981	
			6 P. M.	1·52	855	
			12 mid.	2·46	1,430	...
3rd	0·25	0·27	6 A. M.	5·87	4,395	2,530
			12 noon.	4·83	3,308	3,281
			6 P. M.	3·80	2,280	2,235
4th	0·05	0·07	6 A. M.	2·15	1,242	1,616
			6 P. M.	1·52	855	1,678
5th	0·00	0·10	6 A. M.	2·46	1,430	1,886
			6 P. M.	1·66	927	
6th	0·10	0·00	6 A. M.	1·20	710	1,070
			6 P. M.	1·00	628	
7th	0·45	0·00	6 A. M.	0·85	572	901
			6 P. M.	0·80	554	
8th	0·00	0·00	6 A. M.	1·66	927	1,360
			6 P. M.	1·37	784	

Table of Rainfall and Discharge of Perryaur during November 1871.—(Continued.)

Date.	Rainfall at Perryaur Camp.	Rainfall at Kythury Camp.	Hours.	Water level in feet.	Discharge. Cubic feet per second.	Discharge. 1,000 Cubic yards per day.
	Inches.	Inches.				
9th	0·00	0·00	6 A. M.	0·92	598	907
			6 P. M.	0·75	536	
10th	0·05	0·00	6 A. M.	0·62	490	774
			6 P. M.	0·58	477	
11th	0·05	0·00	6 A. M.	0·50	451	753
			6 P. M.	0·62	490	
12th	0·90	0·03	6 A. M.	1·52	855	1,595
			6 P. M.	2·00	1,139	
13th	0·93	0·70	6 A. M.	1·12	677	1,126
			6 P. M.	1·25	731	
14th	0·09	0·00	6 A. M.	3·25	1,885	2,703
			12 noon.	2·70	1,569	
			6 P. M.	3·10	1,794	
			12 mid.	2·59	1,509	...
15th	0·46	1·61	6 A. M.	2·30	1,337	1,138
			12 noon.	2·46	1,430	1,107
			6 P. M.	2·50	1,461	1,156
			9 P. M.	6·50	4,729	1,268
			12 mid.	4·64	3,104	1,597
16th	0·73	0·12	6 A. M.	3·04	1,761	2,381
			12 noon.	2·50	1,461	
			6 P. M.	2·16	1,242	
17th	0·00	0·00	6 A. M.	4·50	2,972	4,735
			9 A. M.	5·78	4,274	
			12 noon.	4·36	2,830	
			6 P. M.	3·04	1,761	
18th	0·00	0·00	6 A. M.	2·16	1,242	1,803
			6 P. M.	1·80	1,012	
19th	0·00	0·00	6 A. M.	1·37	784	1,212
			6 P. M.	1·25	731	
20th	0·00	0·00	6 A. M.	1·05	649	1,006
			6 P. M.	0·95	609	
21st	0·00	0·00	6 A. M.	0·80	554	886
			6 P. M.	0·80	554	
22nd	0·03	0·00	6 A. M.	0·66	504	795
			6 P. M.	0·62	490	
23rd	0·02	0·10	6 A. M.	0·66	504	832
			6 P. M.	0·75	536	
24th	0·25	0·20	6 A. M.	1·85	1,043	1,450
			6 P. M.	1·34	770	
25th	2·80	2·55	6 A. M.	1·20	710	568
			6 P. M.	1·12	677	1,110
			8 P. M.	*8·88	8,115	1,172
			10 P. M.	*16·64	24,206	4,309
			12 mid.	24·41	50,120	9,910
26th	0·13	0·15	2 A. M.	22·20	41,965	12,278
			4 A. M.	16·98	25,192	8,954
			6 A. M.	12·49	14,143	5,245
			9 A. M.	10·92	11,284	5,085
			12 noon.	8·40	7,450	3,747
			3 P. M.	7·62	6,431	2,776
			6 P. M.	6·54	4,871	2,260
			9 P. M.	5·74	4,220	1,818
			12 mid.	5·06	3,530	1,550

* Estimated.

Table of Rainfall and Discharge of Perryaur during November 1871.—(Concluded.)

Date.	Rainfall at		Hours.	Water level in feet.	Discharge.	
	Perryaur Camp.	Kythury Camp.			Cubic feet per second.	1,000 Cubic yards per day.
	Inches.	Inches.				
27th	0·00	0·00	6 A. M. 6 P. M.	4·46 3·40	2,935 1,978	7,861
28th	0·00	0·00	6 A. M. 6 P. M.	2·84 2·34	1,647 1,361	2,406
29th	0·00	0·00	6 A. M. 6 P. M.	2·05 1·80	1,173 1,012	1,748
30th	0·00	0·00	6 A. M. 6 P. M.	1·64 1·46	916 826	1,394
Total...	8·29	6·54			...	122,528

Depth run off from Catchment Basin of 250 square miles = 5·69 inches.

Mean discharge ... ... { 4,084,266 Cubic yards per day.
170,177 ,, ,, per hour.
1,276 ,, feet per second.

	Cubic yards.
Discharge of Perryaur in November 1869	496,396,000
,, of ,, in ,, 1871	122,528,000
Difference—Excess in November 1869...	373,868,000

Perryaur Camp,
13th December 1871.

(Signed) R. SMITH,
Executive Engineer on special duty,
Madura District.

No. 194. Order thereon, 13th January 1872, No. 102.

IRRIGATION, No. 19.

Ordered to be recorded.

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R.E.,
Secretary to Government.

Ed. E. C. Shanker.

56

Mean Discharge. { 4,084,256 Cubic yards per day
170,177 Cubic yards per hour
1,276 Cubic feet per Second.

	Cubic yards.
Discharge of Periyaur in November 1869	496,396,000
— D° — of — D° — in November 1871	122,528,000
Difference — Excess in Novr. 1869	373,868,000

Sp^l. Ex. Engineer's Office.
Periyaur Camp 13th December 1871.

Compared. [illegible]

Executive Engineer
On Special duty
Madura Dist.

Perryaur Project

Table of Rainfall and discharge of Perryaur during November 1871

Date	Rainfall at Perryaur Camp (Inches)	Rainfall at Rythury Camp (Inches)	Hours	Water level in feet	Discharge Cubic feet per second	Discharge 1000 Cubic yards per day
1	0.33	0.17	6 a.m	0.07	344	545
			6 p.m	0.04	337	
2	0.67	0.47	6 a.m	3.04	1761	2011
			12 noon	1.75	981	
			6 p.m	1.52	855	
			12 mid	2.46	1430	2530
3	0.25	0.27	6 a.m	5.87	4395	3281
			12 noon	4.83	3308	2235
			6 p.m	3.80	2280	1616
4	0.05	0.07	6 a.m	2.15	1242	1678
			6 p.m	1.52	855	
5	0.00	0.10	6 a.m	2.46	1430	1886
			6 p.m	1.66	927	
6	0.10	0.00	6 a.m	1.20	710	1070
			6 p.m	1.00	628	
7	0.45	0.00	6 a.m	0.85	572	901
			6 p.m	0.80	554	
8	0.00	0.00	6 a.m	1.66	927	1360
			6 p.m	1.37	784	
9	0.00	0.00	6 a.m	0.92	598	907
			6 p.m	0.75	536	
10	0.05	0.00	6 a.m	0.62	490	774
			6 p.m	0.58	477	
11	0.05	0.00	6 a.m	0.50	457	753
			6 p.m	0.62	490	
12	0.90	0.03	6 a.m	1.52	855	1595
			6 p.m	2.00	1139	
13	0.93	0.70	6 a.m	1.12	677	1126
			6 p.m	1.25	731	
14	0.09	0.00	6 a.m	3.25	1885	2703
			12 noon	2.70	1569	
			6 p.m	3.10	1794	
			12 mid	2.59	1509	
15	0.46	1.61	6 a.m	2.30	1337	1138
			12 noon	2.46	1430	1107
			6 p.m	2.50	1461	1156
			9 p.m	6.50	4729	1268
			12 mid	4.64	3104.	1597
16	0.73	0.12	6 a.m	3.04	1761	2381
			12 noon	2.50	1461	
			6 p.m	2.16	1242	
17	0.00	0.00	6 a.m	4.50	2972	4735
			9 a.m	5.78	4274	
			12 noon	4.36	2830	
			6 p.m	3.04	1761	
18	0.00	0.00	6 a.m	2.16	1242	1803
			6 p.m	1.80	1012	
19	0.00	0.00	6 a.m	1.37	784	1212
			6 p.m	1.25	731	
20	0.00	0.00	6 a.m	1.05	649	1006
			6 p.m	0.95	609	
21	0.00	0.00	6 a.m	0.80	554	886
			6 p.m	0.80	554	
22	0.03	0.00	6 a.m	0.66	504	795
			6 p.m	0.62	490	
23	0.02	0.10	6 a.m	0.66	504	832
			6 p.m	0.75	536	
24	0.25	0.20	6 a.m	1.85	1043	1450
			6 p.m	1.34	770	
25	2.80	2.55	6 a.m	1.20	710	568
			6 p.m	1.12	677	1110
			8 p.m	*8.88	8115	1172
			10 p.m	*16.64	24,206	4309
			12 mid	24.41	50,120	9910
26	0.13	0.15	2 a.m	22.20	41,965	12278
			4 a.m	16.98	25192	8954
			6 a.m	12.49	14,143	5245
			9 a.m	10.92	11,284	5085
			12 noon	8.40	7,450	3747
			3 p.m	7.62	6,431	2776
			6 p.m	6.54	4,871	2260
			9 p.m	5.74	4,220	1818
			12 mid	5.06	3530	1550
27	0.00	0.00	6 a.m	4.46	2935	7861
			6 p.m	3.40	1978	
28	0.00	0.00	6 a.m	2.84	1647	2406
			6 p.m	2.34	1361	
29	0.00	0.00	6 a.m	2.05	1173	1748
			6 p.m	1.80	1012	
30	0.00	0.00	6 a.m	1.64	916	1394
			6 p.m	1.46	826	
Total	8.29	6.54 Inches			Total	122,528

* Estimated.

Depth run off from Catchment basin of 250 Square miles = 5.69 Inches.

Mears.

Ko.
1/809/71

Enclosure No. 1 in a Letter from the Executive Engineer, On Special duty Madura Distt dated 13th December 1871.

No. 74

To,
The Actg Chief Engr
for Irrigation
Madras.

P. W. 6061/71

Table of rain-fall and discharge of Perryaur during Novemr 1871. —

Pro - 13th Jany /72 L L193.

print with proceedings

No. 7 A 98

Exe: Engineer's Office
Perryaur Camp
13th December 1871

From
The Executive Engineer
for Special duty
Madura District

To.
The Chief Engineer
for Irrigation
Fort St George

Sir.

I have the honor to submit the subjoined Report of the progress made, with the Perryaur investigations, during the past month.

2 The contour survey of the portions of the Perryaur basin, now under examination, was carried on, throughout the month, but I regret to have to state ~~that~~ the work done is below the average as Lieut Green

was

was compelled, by indisposition to give up outdoor work for 16 days.

3. Tolerable progress has been made with the Trial pits on the Escape saddle, and on the Hill, between it and the Northern extremity of the proposed Reservoir embankment, but no very reliable results have been obtained, regarding the level of the compact rock, as the funds, at our command, would not admit of these excavations being vigorously prosecuted.

4. At 12 o'c P.M. on the 25th Ultimo the Perryaur rose to 24.41 feet, above datum, and measures were taken

and

early the following morning, to ascertain the surface fall, and the surface velocity of the stream, at different stages of the flood. The information collected will be tabulated and submitted with the Perryar Report for the current month.

5 The Diagrams and Register showing the rainfall, at the Perryaur Camps, and the discharge of the Perryaur, during the month under review, are enclosed.

I have the honor to be
Sir
Your most obedt Servt
J. G. Smith
Exe: Engineer
On Special duty

P. W. Depart.
C. E. No. 869

No. 6061.

From
The Exe: Engineer
on Special duty
Madura District

To
The Chief Engineer
for Irrigation
Fort St. George.
Enclos. 1

Dated 13th December
Received 19th 1871
Recd/20"
+1 Diagram Guneato
the Irrigation depa
No. 102-13th Jany 16/1/72

Report showing
the progress made
with the Perryaur
investigations during
November 1871 with an ad

18

No. 102.
Ordered to be recorded
J.

Cho 6061

Govt. of {1872} Madras.

PUBLIC WORKS.

To

Dated

Recd. *Encl.* 1

G. O. 13th Jany 1872, No 102.

Nos. 193 & 194

Perryaur Project. Progress report on the Perryaur project during November 1871, recorded.